

REMARKS

Reconsideration is respectfully requested.

The above amendments to Claim 1 are made without prejudice and for purposes of more clearly pointing out and specifically claiming the subject matter considered by the inventors to be their invention. As amended, Claim 1 now more clearly recites the structure which corresponds to the "side pumping" feature of the invention. That is, the diodes are placed so that a substantial portion of the waveguide axial length is exposed to the diodes. Support for this amendment may be found in the originally filed specification at page 3, lines 2-30, describing Figs. 1-3, which are also relied upon for illustrating the "side pumping" feature. No new matter has been added.

It is respectfully submitted that the rejection of Claims 1, 2, 3, 5, 7 and 8 under 35 USC §102(e) over Amersfoort et al. is improper. While it is recognized that Amersfoort et al. technically may fall under §102(e) of the Patent Statute as a basis for this rejection, using §102(a) as the basis may raise extraneous issues not otherwise present. While none of the provisions of the American Inventors Protection Act of 1999 (AIPA) may be applicable to examination of this application, it should be noted that the filing date of this application is in fact May 1, 2001, which is after the November 29, 2000 effective date of AIPA. The point is moot, however, in that § 102(a) is respectfully considered to be the proper basis for rejection over Amersfoort et al. in that the issue (publication) date thereof is before the filing date of the priority document.

The rejection of Claims 1, 2, 3, 5, 7 and 8 over Amersfoort et al. as above, and further in rejection of Claims 4 and 6 under 35 USC §103(a), relying also on Scifres et al., are also respectfully considered to be improper for the following substantive reasons.

It is respectfully submitted that the features recited in Claim 1, as amended, distinguish the cited references to Amersfoort et al. and Scifres et al.

In response to the claim rejections, it is respectfully suggested that Amersfoort et al. fail to disclose a significant feature recited in Claim 1, that is, a plurality of waveguides wherein each one is "arranged such that at least a substantial portion of an axial length of the waveguide is exposed to the diodes." At least one novel aspect of the present invention resides in the concept of a plurality of waveguides being spaced adjacent to an array of closely spaced diodes, the plurality of waveguides being arranged such that at least a substantial portion of an axial length of the waveguide is exposed to the diodes, such that each waveguide is arranged to lase on exposure to a radial pump energy emitted from the diodes.

In contradistinction, Amersfoort et al. reveals a system where diodes are arranged to be coupled to an optical fibre. There is no clear substantive disclosure of each waveguide being arranged to lase upon exposure to the radiant pump energy emitted from the diodes. Furthermore, there is no embodiment disclosed in Amersfoort et al. which reveals a system where each waveguide is arranged such that at least a substantial portion of an axial length of the waveguides is exposed to the diodes. Therefore, it is submitted that Claim 1, as amended, distinguishes Amersfoort et al. for the above reasons and also fails to make obvious the recited limitation. Amersfoort et al. in fact, teaches away from Applicant's invention as claimed.

Scifres et al. also fails to teach or disclose a side pumped lasing technique, in that there is in Figs. 1 and 2, lasing into the ends of an optical fiber, as is done conventionally. Thus Scifres et al. fail to provide any teaching of the above-mentioned recited structure that adds significantly to the teachings of Amersfoort et al., and Claims 4 and 6 are considered to be non-obvious over Amersfoort et al. and Scifres et al., whether taken together or separately.

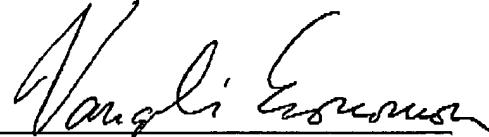
Thus, it is respectfully suggested that the structure of waveguide is arranged to lase upon exposure to the radiant pump energy emitted from the diodes. Amersfoort et al. teach toward a structure specifically designed for integrating or coupling light into many guides. There is no disclosure or teaching toward the underlying inventive concept of "side pumping" structure of the invention, as now structurally recited in Claim 1. It is respectfully submitted that Claim 1 is allowable, as amended, as it is novel and non-obvious, and correspondingly Claims 2, 3, 5, 7 and 8 are also considered allowable.

With regard to the rejections of Claims 4 and 6, when determining the invention as a whole, it is clear that Amersfoort et al. and Scifres et al., taken together, do not teach toward the broad invention as disclosed in Claim 1. That is, both Claims 4 and 6, when taken in combination with Claim 1 are clearly novel and non-obvious over what is disclosed by Amersfoort et al. and Scifres et al. in that a prima facie case of obviousness is not shown by the references.

It is considered that amendments to Claim 1 find support in the application specification as filed, and that the combination of elements recited in the Claims 1-8 distinguish over the references of record.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections and earnestly solicit an indication of allowable subject matter.

Respectfully submitted,


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